



THE BUILDING CODE AND FIRE PREVENTION CODE RELATIONSHIP

ADOPTION OF MODEL FIRE CODE

The State of Wisconsin adopted
the **2012 edition of NFPA 1**
effective September 1, 2014
through **SPS 314** the Fire
Prevention Code.

SCOPE

SPS 314 applies to all public buildings and places of employment that exist on or after **September 1, 2014**.

RELATIONSHIP BETWEEN THE IFC AND NFPA

The International Fire Code (IFC) incorporates over 200 NFPA Codes and Standards as referenced documents for the purpose of building construction.

ACCESS TO NFPA 1

Codes may be accessed free of charge
at www.nfpa.org

A subscription is needed to download
material from this site.

**DOES THE FIRE CODE HAVE
BUILDING DESIGN
REQUIREMENTS?**

Yes.

PHOTOVOLTAIC SYSTEMS

11.12.2.2 Access, Pathways, and Smoke Ventilation

11.12.2.2.1 General. **Access and spacing requirements** shall be required to provide emergency access to the roof, provide pathways to specific areas of the roof, provide for smoke ventilation opportunity areas, and to **provide emergency egress** from the roof.

SMOKE ALARMS

SPS 314.13 (5) Note: [2] Under ch. SPS 366, all smoke alarms must be replaced by the end of the service period specified by their manufacturer, and a replacement alarm that uses a **battery as the primary power source must have a non-replaceable, non-removable battery which is capable of powering the alarm for at least ten years.**

EQUIPMENT ACCESS

NFPA 1 Chapter 13 has access, signage, and location requirements for fire sprinkler and alarm systems.

SAFE GUARDS DURING CONSTRUCTION

16.4.3.1.3 Where underground **water mains and hydrants** are to be provided, they **shall** be installed, completed, and **in service** prior to commencing construction work on any structure.

FIRE DEPARTMENT ACCESS & WATER SUPPLY

18.1 Fire Department access and water supplies shall comply with this chapter.

18.1.1.1 This chapter shall apply to public and privately owned **fire apparatus access roads**.

18.1.1.2 This chapter shall apply to public and privately owned **fire hydrant systems**.

ACCESS BOXES

- 18.2.2.1 Access Box(s) The AHJ shall have the authority to require an access box(s) to be installed in an accessible location where access to or within a structure or area is difficult because of security. The access box(s) shall be of an approved type listed in accordance with UL 1037.

FIRE DEPARTMENT ACCESS ROADS

18.2.3.1 Required Access

18.2.3.1.1 Approved fire department access roads shall be provided for every facility, building, or portion of a building hereafter constructed or relocated.

ACCESS ROADS

18.2.3.1.4 When fire department access roads cannot be installed due to location on property, topography, waterways, nonnegotiable grades, or other similar conditions, the AHJ shall be authorized to require additional fire protection features.

ACCESS ROADS

18.2.3.2.1 A fire department access road shall extend to **within 50 feet (15 m) of at least one exterior door that can be opened from the outside** and that provides access to the interior of the building.

ACCESS ROADS

18.2.3.2.2 Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located **not more than 150 ft (46 m)** from fire department access roads as measured by an approved route around the exterior of the building or facility.

ACCESS ROADS

MULTIPLE

18.2.3.3 More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

ACCESS ROAD SPECIFICATIONS

18.2.3.4.1.1 Fire department access roads shall have an **unobstructed width of not less than 20 ft (6.1 m).**

18.2.3.4.1.2 Fire department access roads shall have an **unobstructed vertical clearance of not less than 13 ft 6 in. (4.1 m).**

ACCESS ROAD SPEC MODIFICATION

18.2.3.4.1.2.2 Vertical clearances
or widths shall be increased when
vertical clearances or widths are
not adequate to accommodate
fire apparatus.

ACCESS ROAD SURFACE

18.2.3.4.2 Surface. Fire department access roads shall be designed and maintained to support the **imposed loads of fire apparatus** and shall be provided with an **all-weather driving surface.**

ACCESS ROAD

TURNING RADIUS/DEAD ENDS

18.2.3.4.3.1 The turning radius of a fire department access road shall be as approved by the AHJ.

18.2.3.4.4 Dead Ends. Dead-end fire department access roads in **excess of 150 ft (46 m)** in length shall be provided with approved provisions for the fire apparatus to **turn around**.

ACCESS ROAD BRIDGES

18.2.3.4.5.1 When a bridge is required to be used as part of a fire department access road, it shall be constructed and maintained in accordance with recognized standards.

18.2.3.4.5.2 The bridge shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.

ACCESS ROADS MARKING

18.2.3.5.1 Where required by the AHJ, approved signs, approved roadway surface markings, or other approved notices shall be provided and maintained to identify fire department access roads or to prohibit the obstruction thereof or both.

AFTER A BUILDING IS CONSTRUCTED WHO IS RESPONSIBLE FOR THE BUILDING?

Both the Fire Inspector and the Building Inspector. The fire inspector for use, operation, maintenance and testing. During a fire inspection the inspector may notice building alterations have been done, those alteration should be referred to the building inspector for compliance concerns.

USE CHANGES

13.3.3.4.1.5 Changes in Occupancy, Use, Process, or Materials.

The property owner or designated representative **shall not make changes** in the occupancy, the use or process, or the materials used or stored in the building **without evaluation of the fire protection systems** for their capability to protect the new occupancy, use, or materials.

SAMPLE CASE STUDY

What is this?



Vintage Insurance Agency
Agent Kaila Vorpahl
"Old fashion values with modern day service"
920-829-5348
Auto / Home Life / Health Business / Farm

Vintage Insurance Agency

SAMPLE CASE STUDY

Agricultural

Or

Commercial





Vintage Insurance Agency

Agent Kaila Vorpahl

"Old fashion values with modern day service"

920-829-5348

Auto / HomeLife / HealthBusiness / Farm



Stay at HomeCare...
...and I'll be right there.

OPEN





SAMPLE CASE STUDY

How did it come to be?







SAMPLE CASE STUDY

Who should address it?



SAMPLE CASE STUDY

Design and construction?

Yes the building
inspector of
record.



SAMPLE CASE STUDY

Use, operation and
maintenance?

Yes the Fire
inspector.



SAMPLE CASE STUDY

Design and construction?

Yes and also

Electrical and
HVAC

SAMPLE CASE STUDY

Use, operation and
maintenance?

Yes there are Fire
concerns regarding auto
repair and flammable
liquids.



SAMPLE CASE STUDY

Office area being
constructed.

This would be more to the
building side than fire
however exiting is always a
concern.

SAMPLE CASE STUDY

Office area being
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SAMPLE CASE STUDY

Could this be temporary
use?

SAMPLE CASE STUDY

No temporary use is limited to 180 Days and typically a one time use during the year. Example Haunted houses.

HAUNTED HOUSES

Suggested Guidelines for the Setup and Operation of Special Amusement Structures

The Department of Safety and Professional Services and the Fire Prevention Section receive numerous questions from various service organizations and fire departments regarding special amusement structures such as haunted houses. The following information is provided as a guideline for setting up these structures for safety. This information is not an official code interpretation or Department of Safety and Professional Services policy. Local fire departments or municipalities retain authority over these structures.

- 1) Vehicles should be placed a minimum of 20 feet from the structure.
- 2) All decorations, wall coverings, etc., should be fire retardant and meet with the approval of the authority having jurisdiction.
- 3) "No Smoking" signs should be displayed.
- 4) Fire extinguishers should be provided and comply with NFPA 10.
- 5) No open flames or sources of ignition should be present.
- 6) No flammable liquids should be allowed within 50 feet of the structure.
- 7) No LPG tanks or cylinders should be allowed in or within 25 feet of the structure.
- 8) Housekeeping should be maintained at all times with no straw, hay, etc., allowed in the structure.
- 9) Structure should have setback of 20 feet from property line and any other structure.
- 10) Structure should meet load requirements for wind, floor and roof.
- 11) Two exits meeting the requirements of a standard exit door must be provided from each floor level.
- 12) All exits must be a minimum of 36 inches wide. All exits should be illuminated to a minimum of 2.5 foot candles unless attendants are present.
- 13) Electrical wiring and components should meet the requirements of SPS. 316. Extension cords should meet requirements of SPS. 314/NFPA 1.
- 14) Smoke detection may be required by the authority have jurisdiction (AHJ).
- 15) Sufficient attendants should be present on-site to conduct emergency operations in case of fire or medical emergency.
- 16) Life safety hazards such as, but not limited to, the generation of artificial fog are to be the subject of approval of the AHJ.
- 17) Surfaces for walking should be well drained and kept free from debris, obstruction, projections, tripping hazards and other such hazards. Stair treads, risers etc. should meet the rise and run required in SPS. 361-365.



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SAMPLE CASE STUDY

So what is the point?

The point is it is **imperative** that both the fire inspector and the building inspector work together.

SAMPLE CASE STUDY

In words from a very wise and experienced Commercial Building Inspector. “At the end of the day if there are building alterations a referral should be made”.

SAMPLE CASE STUDY

Working together could
be a simple phone call or
it may require a local
inspector to file a
complaint with DSPS.

Questions?

For seminar comments and feedback, please go to:

<https://www.surveymonkey.com/s/industryservicesspeakingevent>